Cotton Production

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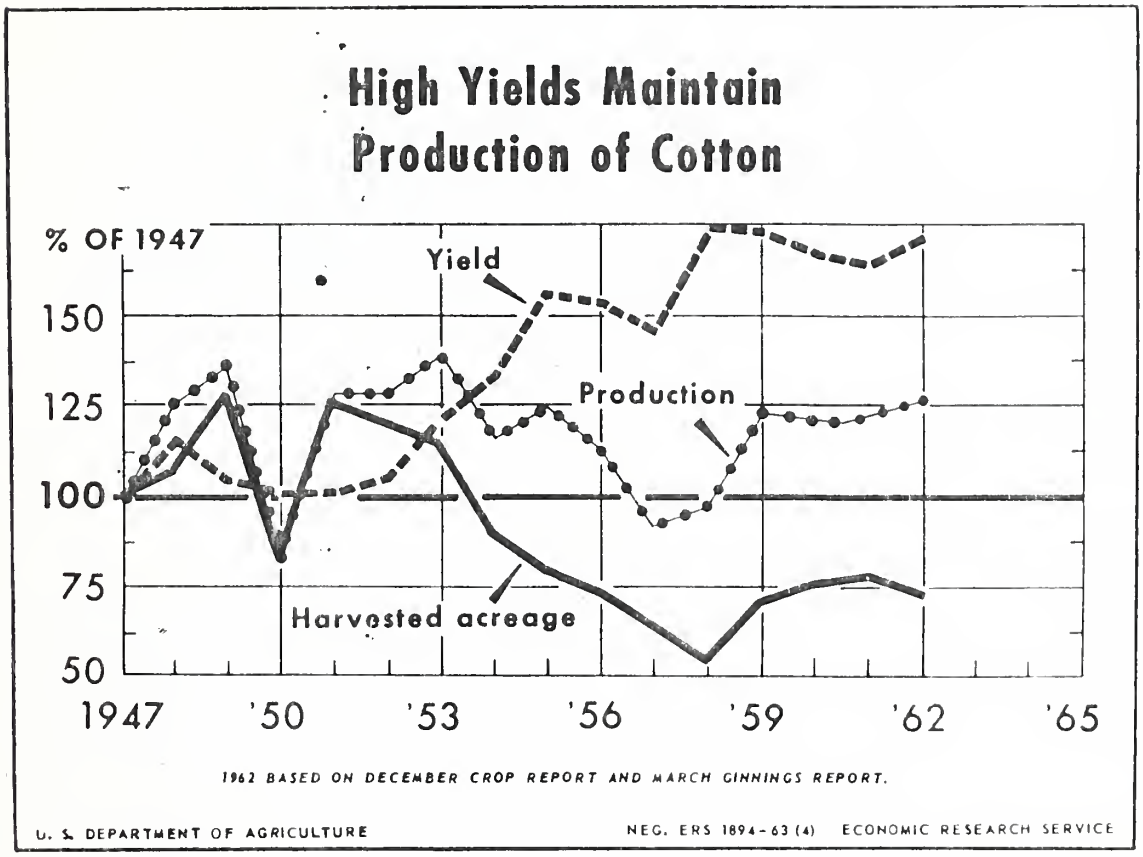
POSTWAR CHANGES IN U. S. COTTON PRODUCTION

by

James R. Donald and Charles H. Wittmann



Important changes have occurred in the components of U.S. cotton production since World War II. During the 1947-62 period, there was a sharp downward trend in harvested acreage. Production trended downward only slightly because of the sharp upward trend in yield per harvested acre. (See chart above.)

The decline in harvested acreage during the postwar period reflected, among other factors, Government programs designed to control or reduce cotton acreage. The primary program was the cotton acreage allotment program, which was in effect for 1950 and each year after 1954. The increase in average yield per harvested acre reflected many factors, including the increased use of fertilizer, chemicals, insecticides, irrigation, shifts in cotton acreage to higher yielding areas, and use of land better suited to cotton production.

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The chart and legend appearing on the cover of this reprint were not contained in the original article but have been added to present a summary of postwar changes in cotton acreage, yield, and production.

Postwar Changes in U. S. Cotton Production

BY

JAMES R. DONALD AND CHARLES H. WITTMANN*

Significant changes have occurred in U. S. cotton production since World War II. During this period, cotton acreage harvested has trended downward, yield per harvested acre has trended upward, production has declined slightly, and the pattern of production has shown some regional shifts. To illustrate, the 1947 crop of 11.9 million bales (500 pound gross weight bales) was produced on 21.3 million harvested acres at an average yield of 267 pounds per acre. Based on the December Crop Report, the 1962 crop of 14.7 million bales was produced on 15.5 million acres at an average yield of 455 pounds. At the same time, the percentage of the U. S. crop produced in the West increased from 10 percent in 1947 to 20 percent in 1962, while declining from 23 to 13 percent in the Southeast. The percent produced in other regions showed slight changes. 1/

The purpose of this analysis is to provide information on postwar changes in cotton acreage, yield, and production in the United States, in regions of the Cotton Belt, and in individual cotton-producing States. While no attempt was made to statistically measure the effect of various factors contributing to changes in acreage and yield, major factors related to these changes were identified.

The analysis covers the entire postwar period, 1947-61, and the 1954-61 period when acreage allotments were in effect. 2/ Changes or trends are measured by average yearly percentage of increase or decline. 3/ In turn, these rates of change are converted into average yearly unit changes; that is, acres, pounds or bales.

The data analyzed for acreage, yield, and production are for all kinds of cotton (upland and extra-long staple). However, harvested acreage of extra-long staple cotton has generally averaged less than 0.5 percent of total harvested acreage. The difference in yield per acre for all kinds of cotton has averaged less than a pound more than yield for upland cotton alone.

CHANGES IN HARVESTED ACREAGE, YIELD AND PRODUCTION, 1947-61

During 1947-61, U. S. cotton acreage harvested trended downward, but it showed wide year to-year variations. Harvested acreage was at a high of 27.4 million acres in 1949 and at a low of 11.8 million in 1958. The rate of decline in harvested acreage during the period was 4.4 percent--equivalent to 858,000 acres per year. (See tables 9 and 10 and figure 2.)

Yield per harvested acre showed an upward trend during most of the 1947-61 period, increasing from 267 pounds per acre in 1947 to a high of 466 in 1958. Yield increased at a yearly rate of 4.5 percent--equivalent to 16 pounds per year. (See tables 11 and 10 and figure 3.)

The decline in harvested acreage more than offset the increase in yield during 1947-61. As a result, U. S. production declined slightly--at a yearly rate of 0.2 percent or about 23,000 bales per year. (See tables 12 and 10 and figure 4.)

1/ States included in each region are as follows:

West	: California, Arizona, New Mexico, and Nevada.
Southwest	: Texas, Oklahoma, and Kansas
Delta	: Missouri, Arkansas, Tennessee, Mississippi, Louisiana, Illinois, and Kentucky
Southeast	: Virginia, North Carolina, South Carolina, Georgia, Florida, and Alabama.

2/ For an analysis of acreage and yield trends during earlier periods, see Rafler, Doris A., and Wittmann, Charles H., "Cotton Acreage and Yield, 1937-57," Cotton Situation, CS-179, November 1958, pp. 26 36.

3/ The relative nature of the trend factors makes it possible to compare directly the components of cotton production even though the original units are measured in acres, pounds, and bales. Thus, for the data plotted in the figures, equal percentage variations are represented by equal vertical distances. The average percentage change in represented by a straight line on ratio scale.

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During 1947-61, harvested acreage declined in each geographical region of the Cotton Belt. Declines ranged from 0.1 percent or 2,000 acres per year in the West to 6.5 percent or 242,000 acres per year in the Southeast. Yield per harvested acre increased in each region--33 pounds per year in the West, 13 pounds in both the Southwest and Delta, and 9 pounds in the Southeast. Production increased in both the West and Southwest, while it declined in the Southeast and Delta. (See table 10.)

In 1947-61, harvested acreage declined in all States, with the exception of Arizona. Yield per acre increased in each State--ranging from 6.3 percent or 13 pounds in Oklahoma to 1.1 percent or 4 pounds in North Carolina. The largest gain in yield per acre, in terms of actual pounds, was recorded in Arizona--35 pounds followed by 34 pounds in California. Production increased at the fastest rate in Arizona--4.4 percent per year or 30,000 bales--and declined at the sharpest rate in North Carolina--5.3 percent or 21,000 bales per year. (See table 10 and figure 7.)

In figures 2, 3, 4, 5, 6, and 7, data by regions and States are plotted for harvested acreage, yield, and production, respectively. For both regions and States, data are plotted in sequence to conform to the rate of change during 1954-61.

CHANGES IN ACREAGE ALLOTTED AND PLANTED, 1954-61

U.S. acreage allotted for all kinds of cotton trended downward during 1954-61, dropping from a high of 21.4 million acres in 1954 to a low of 17.4 million in 1959. (See table 13.)

The average rate of decline in allotted acreage during 1954-61 was 1.5 percent per year, equivalent to 276,000 acres annually. By region, allotments increased slightly in the West and declined in other regions. The sharpest annual rate of decline was in the Southeast--2.5 percent, equivalent to 84,000 acres per year. The sharpest rate of decline in State allotments was in Oklahoma--3.0 percent per year--followed by Georgia with a decline of 2.8 percent per year. (See table 14.)

Acreage planted to cotton declined faster than allotted acreage during 1954-61, dropping from 20.1 million acres in 1954 to a low of 12.4 million in 1958 when Acreage and Conservation Reserve programs were in effect. The rate of decline was 2.8 percent or 471,000 acres per year compared with 1.5 percent decline in allotted acreage. This sharper decline in planted acreage reflects increased underplanting of acreage allotments in some regions and States. (See table 14.)

Planted acreage declined in each region, with the exception of the West. The sharpest decline was 5.4 percent or 150,000 acres per year in the Southeast, followed by 2.8 percent or 214,000 acres in the Southwest. The State showing the sharpest decline was Georgia--6.7 per cent per year, equivalent to 50,000 acres. (See table 14.)

Rates of change for 1954-61 and 1954-62 in acreage allotted and planted for the entire United States, for regions and for States, are shown in table 14.

In 1954-61, as well as in 1954-62, the sharper decline in acreage planted than in acreage allotted reflects increased underplanting of cotton. In 1955, about 99 percent of the allotted acreage was planted compared with 70 percent in 1958 and an average of 90.5 percent in 1959-62. Underplanting, as a percent of allotments, averaged highest in the Southeast and lowest in the West, where plantings were near 100 per cent of allotments, except in 1957-58. Although over 95 percent of cotton allotments were planted in the Southeast in 1955-56, this percentage fell to 49 percent in 1958 and averaged 81 percent during 1959-62. (See table 13.)

By States, the largest underplanting of cotton was in Georgia. An average of 93 percent of allotments was planted during 1954-56. This average fell to 43 per cent in 1958 and averaged about 77 percent for 1959-62. (See table 13.)

CHANGES IN HARVESTED ACREAGE, YIELD AND PRODUCTION, 1954-61

During 1954-61, when acreage allotments were in effect, the year-to-year variation in harvested acreage was not as extreme as in earlier years. However, acreage trended downward at a rate of 2.8 percent annually--equivalent to 436,000 acres per year. Production trended upward as increasing yields more than offset the decline in acreage. The 0.6 percent annual increase in production was equivalent to 76,000 bales per year, while the 3.0-percent increase in yield was equivalent to 13 pounds per acre annually. (See table 10 and figure 3.)

During 1954-61, harvested acreage trended downward in each region, except in the West where it showed a slight increase. The sharpest rate of decline was recorded in the Southeast--5.6 percent or 151,000 acres per year. Production increased in the West and Southwest, while declining in the Southeast and Delta. The sharpest rate of production increase was in the Southwest--3.1 percent or 136,000 bales per year. The sharpest yearly

decline was in the Southeast--4.4 percent or 89,000 bales per year. Yield per acre increased in each region, ranging from a rate of 5.1 percent in the Southwest to 1.0 percent in the Southeast. The largest actual average increase in yield was in the West, 16 pounds per acre per year, and the smallest in the Southeast, 3 pounds. (See table 10 and figure 3.)

During 1954-61, harvested acreage trended downward in all States except Arizona, California, and New Mexico. Cotton production trended downward in 8 of the 14 major producing States. The sharpest annual average rate of decline, 5.0 percent, was in North Carolina, and the sharpest increase, 5.0 percent, was in California. Yields increased in 12 of the 14 States. The largest actual annual increase was 33 pounds per acre in California. The sharpest annual increase, on a percentage basis, was 7.9 percent in Oklahoma. (See table 10 and figure 6.)

FACTORS CONTRIBUTING TO POSTWAR CHANGES IN ACREAGE, YIELD, AND PRODUCTION

The downward trend in cotton acreage harvested in the United States during 1947-61 reflected, among other factors, Government programs designed to control or reduce cotton acreage. The primary program was the cotton acreage allotment program, which was in effect for 1950 and during 1954-61.

Other programs, which have special significance in contributing to differences in acreage trends in the various regions and States, include the Acreage Reserve program, in effect for 1956-58, and the Conservation Reserve program, in effect during 1956-61. Participation in these programs was particularly heavy in the South eastern States. Also, the "Choice" programs in effect during 1959 and 1960 resulted in temporary shifts in cotton acreage. Producers in the Far West generally chose a program which permitted planting in excess of regular acreage allotments, while Eastern producers generally planted their regular acreage allotments.

Producer alternatives to cotton production also contributed to the downward trend in harvested acreage during the postwar period, especially during the latter part of the period. These alternatives, both on and off the farm, contributed to large underplanting of cotton acreage, particulary in the Southeastern States.

The increase in the U. S. average yield per harvested acre in the postwar period reflected many factors, including the increased use of fertilizer, chemicals, insecticides, irrigation, shifts in cotton acreage to higher yielding areas, and use of land better suited to cotton production. Factors which contributed to regional differences in yield included differences in adoption of improved cultural practices and of special practices. For example, in the Far West where yields are more than double the national average, insects were controlled to a large extent, extensive acreage was irrigated, and considerable acreage was "skip-row" planted during the latter part of the postwar period.

* * *

The next issue of the Cotton Situation is scheduled for release June 7, 1963.

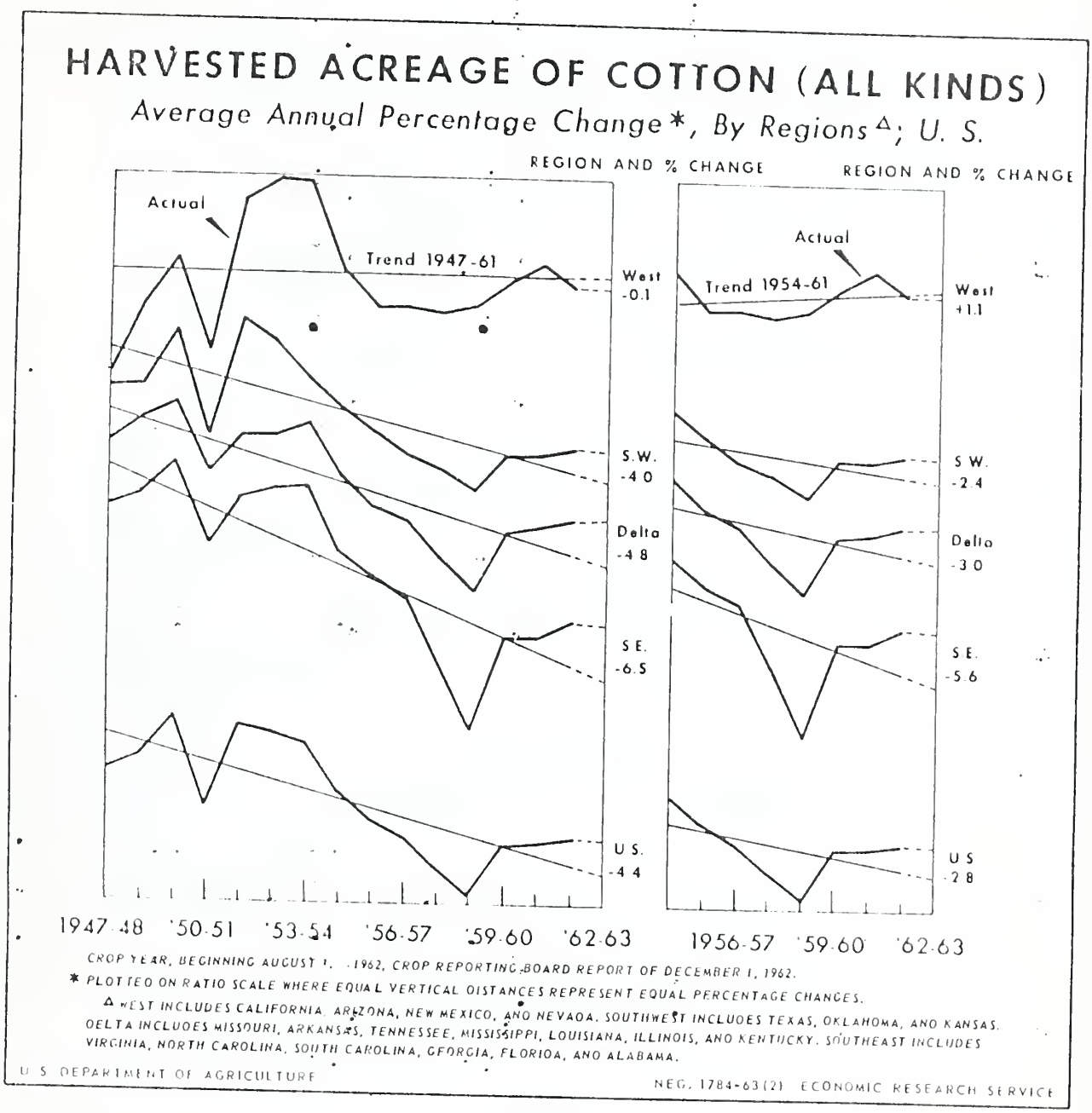
HARVESTED ACREAGE OF COTTON (ALL KINDS)
Average Annual Percentage Change*, By Regions△; U. S.
REGION AND % CHANGE
REGION AND % CHANGE
Actual
Trend 1947-61
Trend 1954-61
West -0.1
S.W. -4.0
Delta -4.8
S.E. -6.5
U.S. -4.4
West +1.1
S.W. -2.4
Delta -3.0
S.E. -5.6
U.S. -2.8
1947-48 '50-51 '53-54 '56-57 '59-60 '62-63
1956-57 '59-60 '62-63
CROP YEAR, BEGINNING AUGUST 1. -1962, CROP REPORTING BOARD REPORT OF DECEMBER 1, 1962.
* PLOTTED ON RATIO SCALE WHERE EQUAL VERTICAL DISTANCES REPRESENT EQUAL PERCENTAGE CHANGES.
△ WEST INCLUDES CALIFORNIA, ARIZONA, NEW MEXICO, AND NEVADA. SOUTHWEST INCLUDES TEXAS, OKLAHOMA, AND KANSAS. DELTA INCLUDES MISSOURI, ARKANSAS, TENNESSEE, MISSISSIPPI, LOUISIANA, ILLINOIS, AND KENTUCKY. SOUTHEAST INCLUDES VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA, GEORGIA, FLORIDA, AND ALABAMA.
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FIGURE 2

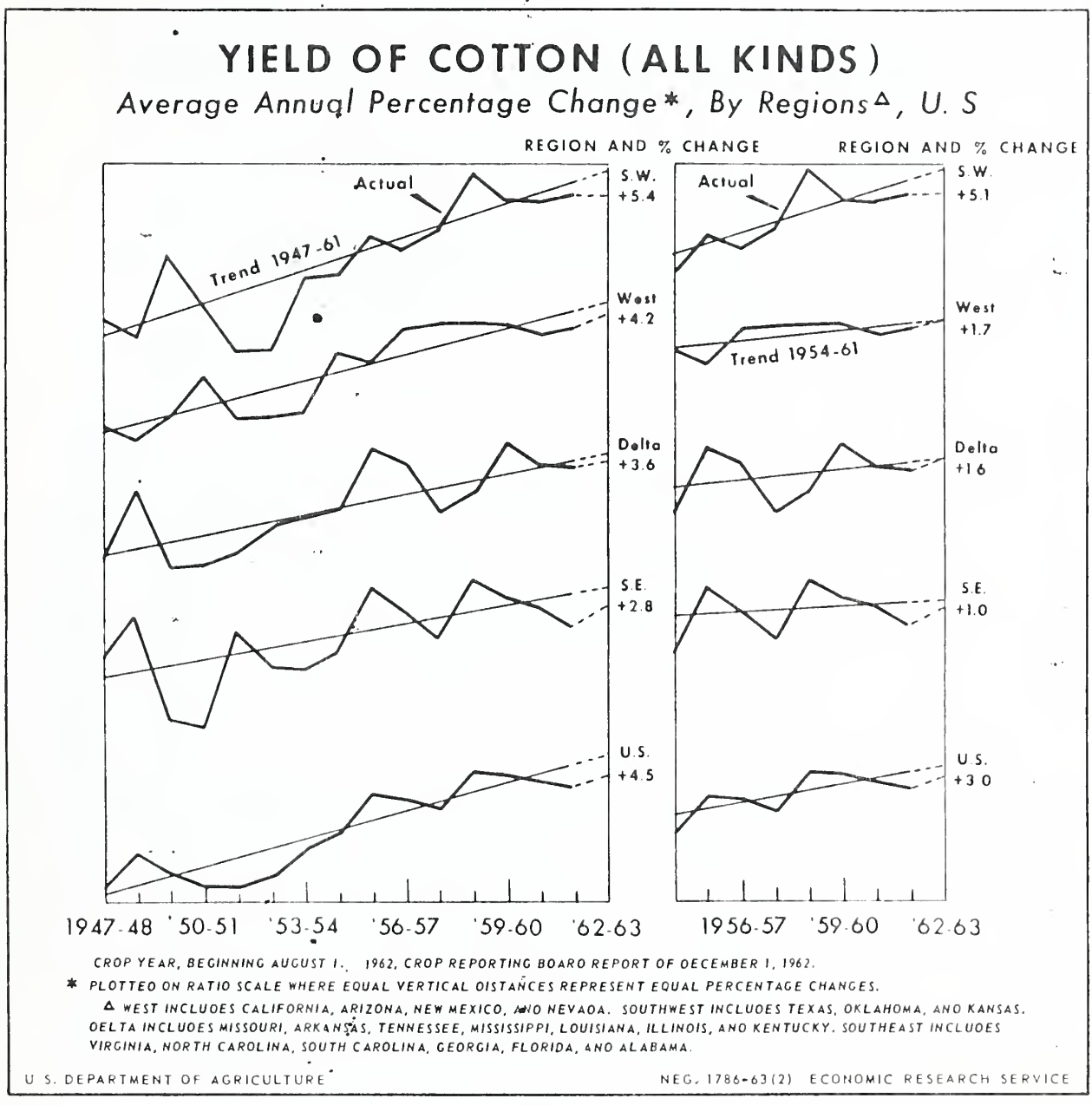
YIELD OF COTTON (ALL KINDS)
Average Annual Percentage Change*, By Regions△, U. S
REGION AND % CHANGE
REGION AND % CHANGE
Actual
Trend 1947-61
S.W. +5.4
West +4.2
Delta +3.6
S.E. +2.8
U.S. +4.5
Actual
Trend 1954-61
S.W. +5.1
West +1.7
Delta +1.6
S.E. +1.0
U.S. +3.0
1947-48 '50-51 '53-54 '56-57 '59-60 '62-63
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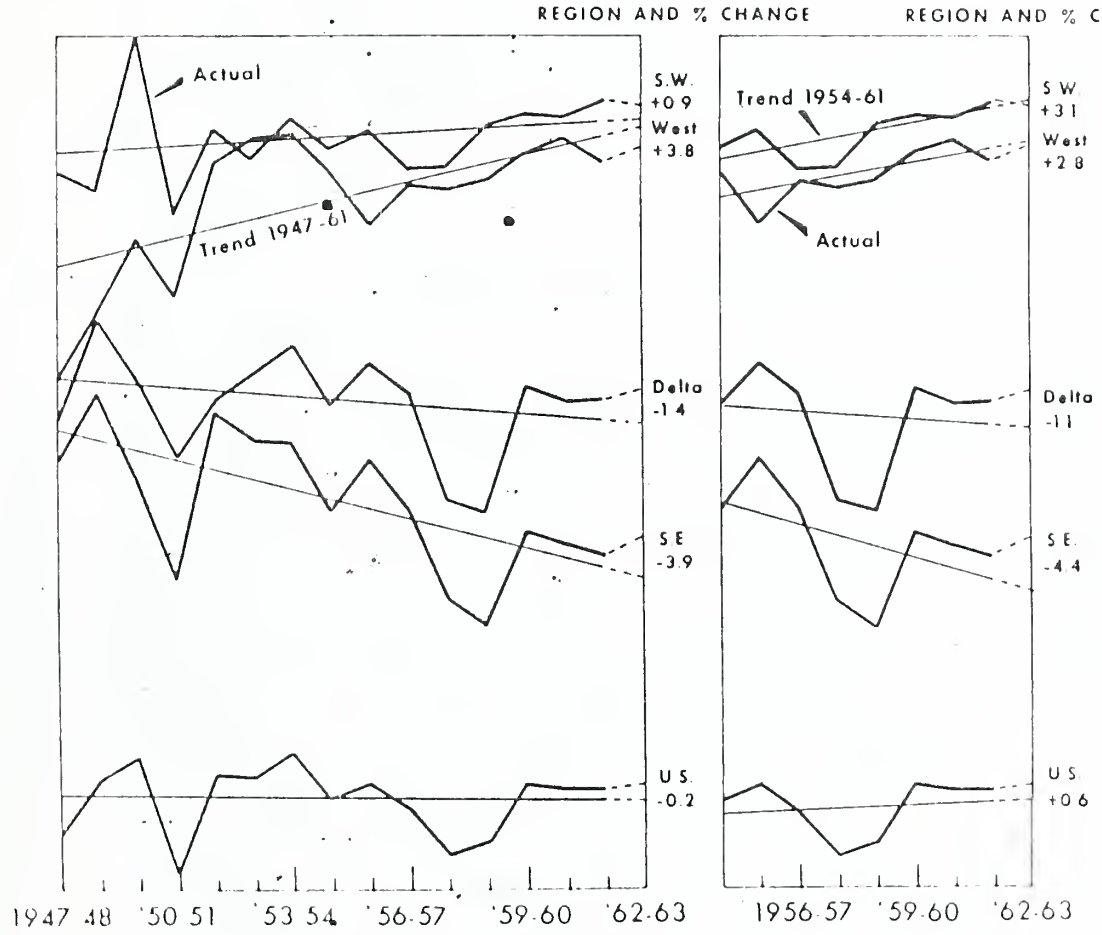
FIGURE 3

PRODUCTION OF COTTON (ALL KINDS)

Average Annual Percentage Change, By Regions△, U. S.*



CROP YEAR, BEGINNING AUGUST 1. 1962, CROP REPORTING BOARD REPORT OF DECEMBER 1, 1962.

* PLOTTED ON RATIO SCALE WHERE EQUAL VERTICAL DISTANCES REPRESENT EQUAL PERCENTAGE CHANGES.

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FIGURE 4

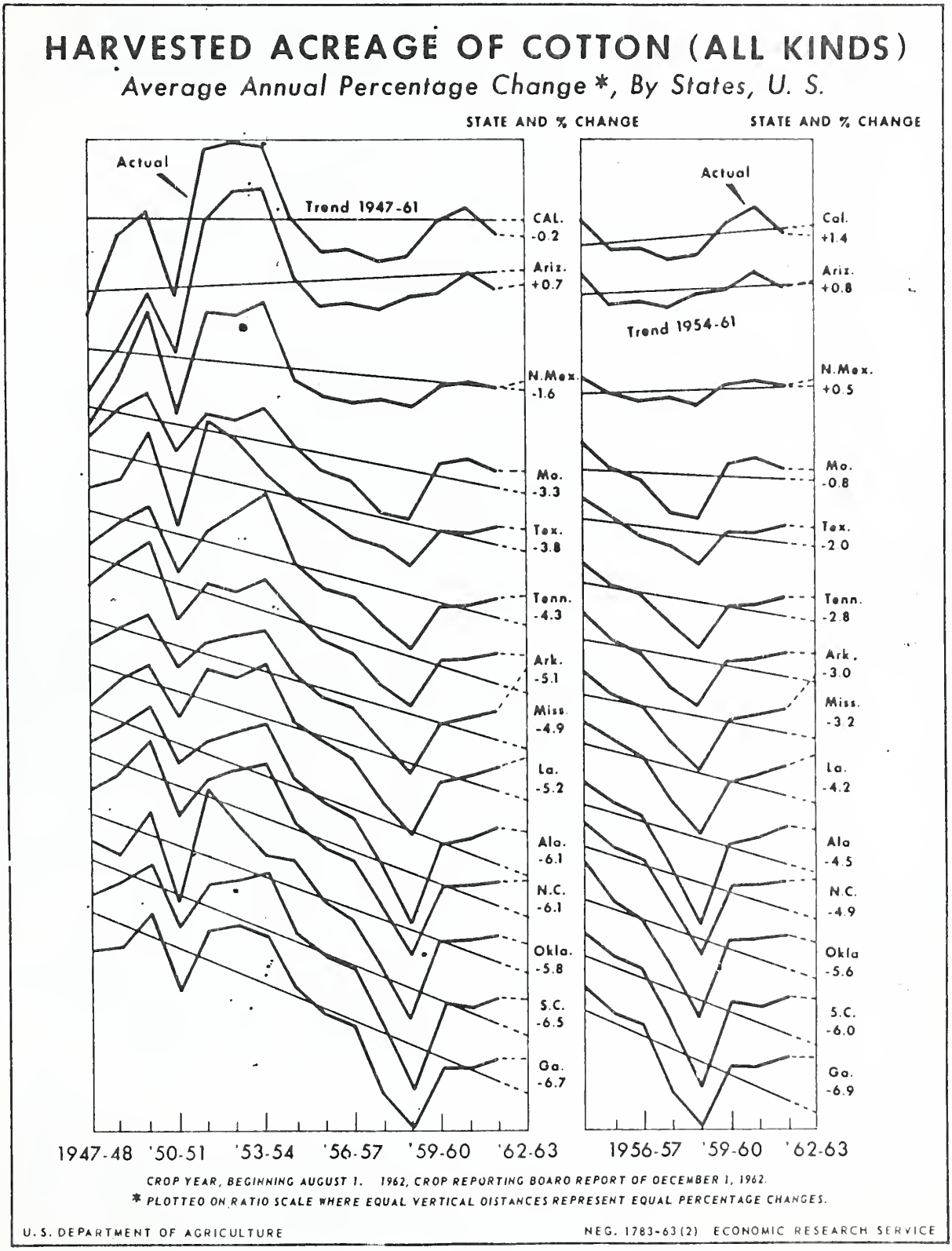
HARVESTED ACREAGE OF COTTON (ALL KINDS)
Average Annual Percentage Change *, By States, U. S.
STATE AND % CHANGE
STATE AND % CHANGE
Actual
Trend 1947-61
Actual
Trend 1954-61
CAL. -0.2
Ariz. +0.7
N.Mex. -1.6
Mo. -3.3
Tex. -3.8
Tenn. -4.3
Ark. -5.1
Miss. -4.9
La. -5.2
Ala. -6.1
N.C. -6.1
Okla. -5.8
S.C. -6.5
Ga. -6.7
Cal. +1.4
Ariz. +0.8
N.Mex. +0.5
Mo. -0.8
Tex. -2.0
Tenn. -2.8
Ark. -3.0
Miss. -3.2
La. -4.2
Ala -4.5
N.C. -4.9
Okla -5.6
S.C. -6.0
Ga. -6.9
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FIGURE 5

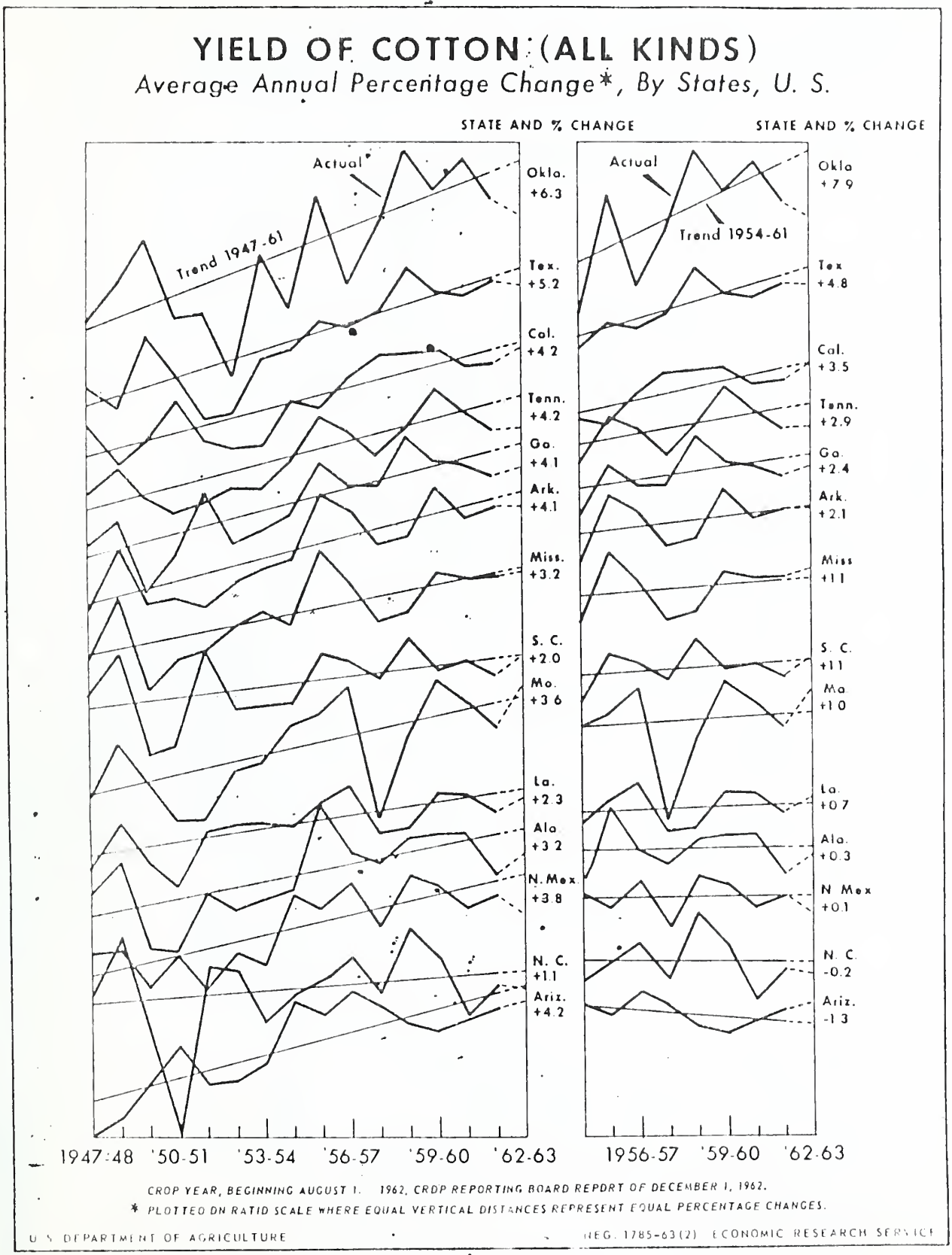
YIELD OF COTTON (ALL KINDS)
Average Annual Percentage Change*, By States, U. S.
STATE AND % CHANGE
STATE AND % CHANGE
Actual
Trend 1947-61
Actual
Trend 1954-61
Okla. +6.3
Tex. +5.2
Cal. +4.2
Tenn. +4.2
Ga. +4.1
Ark. +4.1
Miss. +3.2
S. C. +2.0
Mo. +3.6
La. +2.3
Ala. +3.2
N. Mex. +3.8
N. C. +1.1
Ariz. +4.2
Okla +7.9
Tex +4.8
Cal. +3.5
Tenn. +2.9
Ga. +2.4
Ark. +2.1
Miss +1.1
S. C. +1.1
Mo +1.0
La. +0.7
Ala. +0.3
N Mex +0.1
N. C. -0.2
Ariz. -1.3
1947-48 '50-51 '53-54 '56-57 '59-60 '62-63
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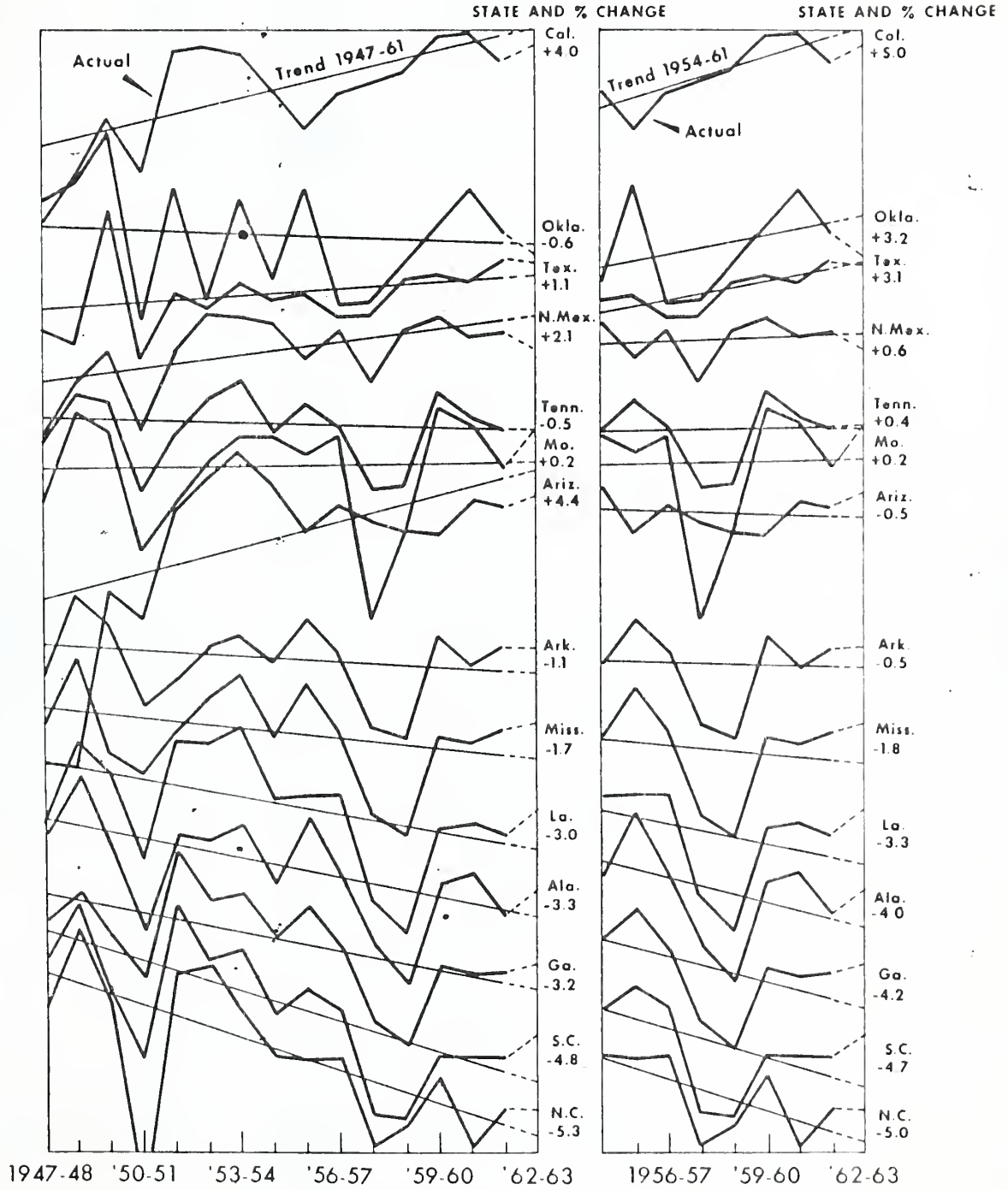
FIGURE 6

PRODUCTION OF COTTON (ALL KINDS)

Average Annual Percentage Change, By States, U. S.*



CROP YEAR, BEGINNING AUGUST 1. 1962, CROP REPORTING BOARD REPORT OF DECEMBER 1, 1962.

* PLOTTED ON RATIO SCALE WHERE EQUAL VERTICAL DISTANCES REPRESENT EQUAL PERCENTAGE CHANGES.

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FIGURE 7

Table 9.--Acreage harvested for cotton, all kinds, United States, by States and regions, 1947 to date

Year	West			Southwest		Delta					Southeast				Region totals 1/				U.S. total 1/
	Ariz.	Calif.	N. Mex.	Okla.	Texas	Ark.	La.	Miss.	Mo.	Tenn.	Ala.	Ga.	N.C.	S.C.	West	S.W.	Delta	S.E.	
	Thousand acres																		
1947	225	534	163	1,120	8,352	2,050	770	2,350	472	730	1,500	1,274	670	1,050	922	9,472	6,388	4,548	21,330
1948	281	804	209	1,025	8,613	2,305	890	2,560	555	820	1,650	1,289	737	1,120	1,294	9,638	7,148	4,831	22,911
1949	385	925	300	1,300	11,100	2,580	950	2,730	600	895	1,890	1,560	880	1,245	1,611	12,400	7,775	5,653	27,439
1950	275	581	170	795	6,790	1,670	715	2,030	435	630	1,305	1,030	580	865	1,026	7,495	5,493	3,829	17,843
1951	573	1,305	300	1,485	11,851	2,045	935	2,340	530	785	1,490	1,410	702	1,100	2,179	13,335	6,650	4,785	26,949
1952	674	1,386	295	1,220	10,700	1,940	690	2,416	515	660	1,585	1,455	745	1,140	2,357	11,920	6,633	5,011	25,921
1953	690	1,340	315	1,020	8,995	2,070	950	2,420	555	950	1,620	1,375	775	1,175	2,347	9,920	7,028	5,046	24,341
1954	420	883	204	950	7,730	1,700	688	1,960	450	646	1,170	1,025	545	830	1,509	8,660	5,458	3,623	19,251
1955	355	745	185	790	6,900	1,460	615	1,700	390	570	1,050	895	480	730	1,287	7,690	4,746	3,205	16,928
1956	358	749	181	715	6,200	1,365	562	1,595	366	543	972	830	440	682	1,290	6,915	4,441	2,969	15,615
1957	352	711	183	540	5,905	1,130	440	1,335	305	465	735	570	344	500	1,248	6,445	3,685	2,182	13,558
1958	377	732	176	410	5,335	1,015	364	1,125	295	400	530	381	263	352	1,288	5,805	3,206	1,550	11,849
1959	383	875	198	625	6,350	1,305	495	1,475	400	510	835	655	390	565	1,459	6,975	4,195	2,486	15,117
1960	426	946	201	630	6,325	1,320	510	1,520	412	512	860	653	390	550	1,577	6,955	4,284	2,493	15,309
1961	392	816	197	645	6,560	1,360	535	1,580	384	538	905	693	396	585	1,409	7,205	4,405	2,615	15,634
1962	401	809	201	625	6,440	1,355	565	1,585	383	540	900	692	402	575	1,414	7,065	4,437	2,605	15,521

1/ Regions include the following additional States:
West: Nevada.
Southwest: Kansas.
Delta: Illinois and Kentucky.
Southeast: Virginia and Florida.

Compiled from reports of Crop Reporting Board, Statistical Reporting Service.

Table 10.--Cotton: Average annual rates of change in acreage harvested, yield, and production, States and regions, 1947-61 and 1954-61

Area	Average relative change						Average unit change 1/					
	1947-61			1954-61			1947-61			1954-61		
	Acreage	Yield per acre	Production	Acreage	Yield per acre	Production	Acreage	Yield per acre	Production	Acreage	Yield per acre	Production
	Percent	Percent	Percent	Percent	Percent	Percent	1,000 acres	Pounds	1,000 bales 2/	1,000 acres	Pounds	1,000 bales 2/
West												
Arizona	0.7	4.2	4.4	0.8	-1.3	-0.5	3	35	30	3	-13	-4
California	-0.2	4.2	4.0	1.4	3.5	5.0	-2	34	58	11	33	79
New Mexico	-1.6	3.8	2.1	0.5	0.1	0.6	-4	23	6	1	1	2
Southwest												
Oklahoma	-5.8	6.3	-0.6	-5.6	7.9	3.2	-53	13	-2	-38	20	11
Texas	-3.8	5.2	1.1	-2.0	4.8	3.1	-301	13	43	-132	15	125
Delta												
Arkansas	-5.1	4.1	-1.1	-3.0	2.1	-0.5	-87	17	-15	-40	9	-7
Louisiana	-5.2	2.3	-3.0	-4.2	0.7	-3.3	-36	9	-17	-22	3	-16
Mississippi	-4.9	3.2	-1.7	-3.2	1.1	-1.8	-97	13	-28	-49	5	-27
Missouri	-3.3	3.6	0.2	-0.8	1.0	0.2	-15	15	1	-3	5	1
Tennessee	-4.3	4.2	-0.5	-2.8	2.9	0.4	-29	18	-3	15	14	2
Southeast												
Alabama	-6.1	3.2	-3.3	-4.5	0.3	-4.0	-75	10	-27	-41	1	-29
Georgia	-6.7	4.1	-3.2	-6.9	2.4	-4.2	-70	12	-19	-51	8	-23
North Carolina	-6.1	1.1	-5.3	-4.9	-0.2	-5.0	-35	4	-21	-21	-1	-15
South Carolina	-6.5	2.0	-4.8	-6.0	1.1	-4.7	-55	6	-27	-37	4	-21
Region averages 3/												
West	-0.1	4.2	3.8	1.1	1.7	2.8	-2	33	92	15	16	74
Southwest	-4.0	5.4	0.9	-2.4	5.1	3.1	-354	13	40	-171	15	136
Delta	-4.8	3.6	-1.4	-3.0	1.6	-1.1	-265	13	-62	-130	8	-48
Southeast	-6.5	2.8	-3.9	-5.6	1.0	-4.4	-242	9	-95	-151	3	-89
U.S. average	4.4	4.5	-0.2	-2.8	3.0	0.6	-858	16	-23	-436	13	76

1/ Corresponding to relative change.

2/ Bales of 500 pounds gross weight.

3/ Includes in addition to States listed above: Nevada in the West; Kansas in the Southwest; Illinois and Kentucky in the Delta; and Florida and Virginia in the Southeast.

Computed from reports of Crop Reporting Board, Statistical Reporting Service.

Table 11.--Yield of cotton, all kinds, United States, by States and regions, 1947 to date

Year	West			Southwest		Delta					Southeast				Region averages 1/				U.S. average 1/
	Ariz.	Calif.	N. Mex.	Okla.	Texas	Ark.	La.	Miss.	Mo.	Tenn.	Ala.	Ga.	N.C.	S.C.	West	S.W.	Delta	S.E.	
	Pounds per acre																		
1947	497	693	528	141	198	296	314	320	315	341	298	246	323	297	616	191	315	286	267
1948	558	576	542	175	176	412	408	441	436	391	353	279	440	372	567	176	421	351	311
1949	674	656	441	225	261	303	329	261	368	338	216	185	253	213	620	257	300	214	282
1950	825	805	526	145	213	313	287	314	278	310	212	228	149	224	764	204	307	209	269
1951	671	648	435	149	165	292	391	329	279	325	293	318	370	379	625	163	322	331	269
1952	673	626	536	104	172	337	408	378	367	355	269	241	366	276	629	164	366	277	280
1953	743	632	497	205	233	358	407	410	386	354	285	262	278	281	646	230	385	275	324
1954	1,039	806	743	151	246	380	399	384	478	405	298	286	319	338	862	235	395	296	341
1955	981	774	688	281	281	545	454	570	502	523	478	376	350	375	818	281	536	405	417
1956	1,108	924	797	175	260	500	496	483	586	488	370	334	391	360	957	269	499	359	409
1957	1,037	1,035	619	234	295	416	380	388	281	427	346	333	321	329	974	290	392	334	388
1958	931	1,049	820	365	383	436	392	409	446	501	398	443	466	406	983	382	430	422	466
1959	893	1,055	782	292	334	566	476	509	607	620	412	381	395	353	975	330	546	386	461
1960	953	981	693	348	329	485	470	486	548	545	421	371	284	360	937	331	497	371	446
1961	1,010	990	728	274	350	512	429	493	469	493	327	354	337	337	959	343	489	358	438
1962	1,059	1,092	657	253	349	514	463	515	583	498	371	371	328	376	1,020	340	512	365	455

1/ Regions include the following additional States:

West: Nevada.
Southwest: Kansas.
Delta: Illinois and Kentucky.
Southeast: Virginia and Florida.

Compiled from reports of Crop Reporting Board, Statistical Reporting Service.

Table 12.--Production of cotton, all kinds, United States, by States and regions, 1947 to date

Year	West			Southwest		Delta					Southeast				Region totals 1/				U.S. total 1/
	Ariz.	Calif.	N. Mex.	Okla.	Texas	Ark.	La.	Miss.	Mo.	Tenn.	Ala.	Ga.	N.C.	S.C.	West	S.W.	Delta	S.E.	
	Thousand bales 2/																		
1947	234	772	179	330	3,437	1,276	505	1,569	311	519	931	653	452	651	1,185	3,767	4,192	2,716	11,860
1948	328	968	236	374	3,153	1,982	756	2,353	506	669	1,197	751	678	871	1,532	3,527	6,282	3,536	14,877
1949	543	1,268	276	610	6,040	1,632	650	1,487	462	633	851	604	466	554	2,088	6,650	4,878	2,512	16,128
1950	474	978	187	242	2,946	1,090	426	1,332	254	409	575	490	181	405	1,639	3,188	3,518	1,669	10,014
1951	803	1,765	273	462	4,074	1,249	760	1,608	309	534	909	935	542	871	2,842	4,536	4,467	3,304	15,149
1952	948	1,818	330	264	3,808	1,366	756	1,906	394	638	890	731	569	657	3,098	4,072	5,068	2,901	15,139
1953	1,070	1,768	327	437	4,317	1,548	806	2,129	449	702	963	752	449	690	3,166	4,754	5,646	2,899	16,465
1954	911	1,487	316	293	3,941	1,351	572	1,571	450	548	728	612	364	501	2,716	4,234	4,507	2,240	13,697
1955	728	1,205	286	463	4,039	1,663	582	2,023	410	623	1,045	701	351	572	2,201	4,502	5,313	2,705	14,721
1956	829	1,446	301	261	3,615	1,426	581	1,609	448	552	750	579	359	513	2,578	3,876	4,629	2,227	13,310
1957	763	1,537	236	263	3,632	981	348	1,081	179	415	530	396	231	344	2,539	3,895	3,010	1,520	10,964
1958	734	1,604	301	313	4,308	925	297	961	275	419	439	352	256	299	2,644	4,621	2,883	1,364	11,512
1959	715	1,929	323	381	4,416	1,544	492	1,568	508	660	718	521	322	417	2,973	4,797	4,784	2,004	14,558
1960	849	1,939	291	458	4,346	1,339	501	1,542	472	583	756	505	232	414	3,086	4,804	4,448	1,934	14,272
1961	828	1,689	300	369	4,786	1,456	479	1,625	377	554	617	512	278	412	2,823	5,155	4,497	1,843	14,318
1962	885	1,840	275	330	4,680	1,450	545	1,700	465	560	695	535	275	450	3,006	5,010	4,729	1,978	14,723

1/ Regions include the following additonal States:
West: Nevada.
Southwest: Kansas.
Delta: Illinois and Kentucky.
Southeast: Virginia and Florida.
2/ Bales of 500 pounds gross weight.

Compiled from reports of Crop Reporting Board, Statistical Reporting Service.

Table 11 -- [illegible] upland cotton allotments, planted acreage and percentage planted, by States, regions and United States, 1954-62

Year	West			Southwest		Delta					Southeast				Region totals 1/				United States total 1/
	Ari-zona	Calif-ornia	New Mexico	Okla-homa	Texas	Arkan-sas	Louis-iana	Missis-sippi	Mis-souri	Ten-nessee	Ala-bama	Geor-gia	North Carolina	South Carolina	West	South-west	Delta	South-east	
	Acreage allotments (thousand acres)																		
1954	430	937	226	1,098	8,733	1,647	750	2,080	463	681	1,846	1,189	625	929	1,595	9,832	5,635	4,156	21,418
1955	352	779	191	673	7,629	1,530	648	1,751	400	594	1,102	951	516	774	1,324	8,501	4,923	3,396	18,157
1956	362	783	188	646	7,427	1,485	611	1,647	378	569	1,025	903	484	726	1,335	8,272	4,635	3,193	17,435
1957	398	811	202	642	7,577	1,527	610	1,644	376	569	1,089	905	493	728	1,413	8,420	4,627	3,212	17,672
1958	403	813	200	827	7,502	1,528	610	1,660	378	583	1,035	906	494	740	1,419	8,330	4,659	3,233	17,635
1959	393	927	205	779	7,284	1,536	604	1,651	422	583	1,064	857	487	725	1,516	8,063	4,760	3,126	17,415
1960	435	974	215	835	7,365	1,553	587	1,651	429	574	996	863	482	713	1,624	8,170	4,707	3,112	17,617
1961	402	837	206	862	7,871	1,520	646	1,762	406	611	1,090	948	509	778	1,448	8,733	4,957	3,382	18,521
1962 2/	413	827	211	847	7,733	1,481	630	1,720	396	601	1,068	932	504	762	1,451	8,580	4,840	3,325	18,200
	Acreage planted (thousand acres)																		
1954	430	898	215	989	8,251	1,732	708	2,010	468	666	1,188	1,044	565	839	1,546	9,239	5,576	3,691	20,052
1955	370	765	195	825	7,670	1,500	630	1,755	400	585	1,065	915	500	750	1,332	8,495	4,881	3,283	17,991
1956	373	773	190	814	7,240	1,415	538	1,655	375	561	1,005	862	462	700	1,338	8,054	4,065	3,080	17,077
1957	367	728	192	578	6,260	1,200	466	1,400	378	505	747	581	355	507	1,289	6,838	3,959	2,224	14,310
1958	386	750	184	430	5,675	1,075	379	1,185	307	416	540	388	271	357	1,323	6,105	3,369	1,582	12,379
1959	389	898	206	660	6,775	1,345	520	1,535	410	525	855	678	400	578	1,497	7,435	4,346	2,555	15,833
1960	434	965	216	655	6,800	1,370	525	1,580	423	525	878	675	410	568	1,619	7,455	4,433	2,573	16,080
1961	400	834	208	705	7,080	1,415	595	1,665	398	557	942	718	418	600	1,446	7,785	4,633	2,718	16,588
1962 2/	412	826	212	678	6,920	1,403	581	1,635	392	553	917	710	417	590	1,454	7,598	4,573	2,671	16,296
	Percentage planted 3/																		
1954	100	96	95	90	94	94	94	97	99	97	88	88	90	90	97	94	99	89	94
1955	105	98	102	95	101	98	97	100	100	98	97	96	97	97	101	100	99	97	99
1956	103	99	101	98	97	99	88	100	99	100	98	95	95	96	100	97	88	98	98
1957	92	90	95	89	83	85	76	85	101	89	73	64	72	70	91	81	86	69	81
1958	96	92	92	52	76	78	62	71	81	71	52	43	55	48	93	73	72	49	70
1959	99	98	100	85	93	94	86	93	97	90	85	79	82	80	99	92	92	82	91
1960	100	99	100	81	92	91	89	96	99	91	88	78	85	80	99	91	94	83	91
1961	100	100	101	82	90	93	92	94	98	91	86	76	82	77	100	89	94	80	90
1962 2/	100	100	100	80	89	95	92	95	99	92	86	76	83	77	100	89	94	80	90

1/ Regions include the following additional States:
West: Nevada.
Southwest: Kansas.
Delta: Illinois and Kentucky.
Southeast: Virginia and Florida.

2/ Preliminary. 3/ Percentages in excess of 100 indicate planted acreage exceeded allotment, prior to acreage allotment compliance.

Compiled from Agricultural Stabilization and Conservation Service and Crop Reporting Board data.

Table 14.--Cotton: Average annual rate of change in acreage allotments and planted, States and regions, 1954-61 and 1954-62

Area	Average relative change				Average unit change 1/			
	1954-61		1954-62		1954-61		1954-62	
	Allotments	Planted	Allotments	Planted	Allotments	Planted	Allotments	Planted
	Percent	Percent	Percent	Percent	1,000 acres	1,000 acres	1,000 acres	1,000 acres
West								
Arizona	1.0	0.5	0.9	0.7	4	2	4	3
California	1.0	1.4	0.4	1.0	8	11	4	8
New Mexico	0.2	0.6	0.3	0.8	0	1	1	2
Southwest								
Oklahoma	-3.0	-5.7	-2.3	-4.3	-26	-41	-20	-31
Texas	-1.2	-2.4	-0.8	-1.8	-94	-173	-61	-124
Delta								
Arkansas	-2.1	-2.7	-1.6	-1.8	-31	-38	-24	-25
Louisiana	-2.0	-3.3	-1.4	-2.0	-13	-19	-9	-11
Mississippi	-1.8	-2.8	-1.3	-1.8	-32	-46	-23	-30
Missouri	-0.4	-0.9	-0.4	-0.6	-1	-3	-2	-3
Tennessee	-1.0	-2.6	-0.7	-1.7	-6	-15	-4	-9
Southeast								
Alabama	-2.6	-4.3	-1.9	-2.9	-28	-39	-21	-27
Georgia	-2.8	-6.7	-2.1	-4.9	-27	-50	-25	-37
North Carolina	-2.2	-4.8	-1.6	-3.5	-12	-21	-8	-15
South Carolina	-2.1	-5.9	-1.5	-4.4	-16	-37	-11	-27
Region averages 2/								
West	0.9	1.0	0.6	0.9	13	15	8	12
Southwest	-1.4	-2.8	-1.0	-2.0	-120	-214	-82	-155
Delta	-1.7	-2.7	-1.3	-1.7	-84	-131	-61	-78
Southeast	-2.5	-5.4	-1.8	-3.9	-84	-150	-61	-108
U.S. average 2/	-1.5	-2.8	-1.1	-2.0	-276	-471	-194	-329

1/ Corresponding to relative change.

2/ Includes in addition to States listed above: Nevada in the West; Kansas in the Southwest; Illinois and Kentucky in the Delta; and Florida and Virginia in the Southeast.

Computed from reports of Crop Reporting Board, Statistical Reporting Service.